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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,112	01/18/2002	Kiyoo Morita	Q66502	6565

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EXAMINER

HAUGLAND, SCOTT J

ART UNIT	PAPER NUMBER
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3654

DATE MAILED: 05/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,112

Applicant(s)

MORITA ET AL.

Examiner

Scott Haugland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 28 February 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Drawings

The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 2/28/03 have been approved. Corrected or substitute drawings were received on 2/28/03. These drawings are approved.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation "said drawing-out member" on lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Martin.

Martin discloses a magnetic tape cartridge comprising a reel having a lower flange 210 in which a portion for engaging a rotary shaft 242 is centered and having an opposing upper flange 208. The upper flange of the reel is free to rotate relative to cartridge case. The lower flange is rotatable (see Fig. 12). Rotary shaft 242 allows rotation of reel. The cartridge has a housing comprising integral upper and lower cases. The upper case has a circular opening having a diameter greater than the diameter of the lower flange and smaller than the diameter of the upper flange.

Claims 11-12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Olsen.

Olsen discloses a magnetic tape cartridge comprising a generally rectangular cartridge case in which a single reel wound with a magnetic tape is rotatably housed, wherein a magnetic tape drawing-out port 56 is provided on a side surface of the

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cartridge case at a position apart from a corner of said cartridge case. The magnetic tape drawing-out port 56 is provided between a position corresponding to a screw hole 32 used for assembling upper and lower cases 16, 18 provided in the corner of said cartridge case, and a position corresponding to a reference hole 88 provided in the vicinity of a central portion of the cartridge case.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin.

Martin discloses a magnetic tape cartridge comprising a reel having a lower flange 210 in which a portion for engaging a rotary shaft 242 is centered and having an opposing upper flange 208. The upper flange of the reel is free to rotate relative to the cartridge case. The lower flange is rotatable (see Fig. 12). Rotary shaft 242 allows rotation of reel. The cartridge has a housing comprising integral upper and lower cases. The upper case has a circular opening having a diameter greater than the diameter of the lower flange and smaller than the diameter of the upper flange.

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Martin does not disclose, in the embodiment of Figures 1-13, a circular cutout portion on the upper case or an annular stepped portion on the upper flange.

Martin teaches (see Fig. 15) providing a circular cutout in the upper case of a cassette cartridge for receiving a stepped portion of an upper flange.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the cartridge of Martin with a circular cutout in the upper case and stepped portion on the upper flange as taught by Martin to securely position and hold the reel against horizontal shifting in the cartridge. It would have been a matter of obvious engineering choice to make the upper flange smaller in diameter than inner diameter of cutout since the modified arrangement would clearly provide equivalent positioning and securing properties.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin as applied to claim 2 above, and further in view of Del Genio, et al.

Martin does not disclose a movement preventing unit.

Del Genio, et al teaches providing a tape cartridge with movement preventing means acting between a reel flange and a cartridge case to prevent unwanted loosening of the tape when the cartridge is not inserted in a tape drive device.

It would have been obvious to one having ordinary skill in the art to provide Martin with movement preventing means as taught by Del Genio, et al to prevent undesired loosening of the tape.

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Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin as applied to claim 1 above, and further in view of Egan '972 (US patent No. 3662972).

Martin does not disclose the claimed reel engaging units.

Egan teaches providing reel engaging units comprising sides of a housing for retaining and protecting a reel.

It would have been obvious to one having ordinary skill in the art to provide Martin with a housing having reel engaging units as taught by Egan to retain and protect the reel of Martin when not in use in a recording or playback device.

Claims 13 and 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Olsen.

Olsen discloses a magnetic tape cartridge comprising a generally rectangular cartridge case in which a single reel wound with a magnetic tape is rotatably housed, wherein a magnetic tape drawing-out port 56 is provided on a side surface of the cartridge case at a position apart from a corner of said cartridge case. The magnetic tape drawing-out port 56 is provided between a position corresponding to a screw hole 32 used for assembling upper and lower cases 16, 18 provided in the corner of said cartridge case, and a position corresponding to a reference hole 88 provided in the vicinity of a central portion of the cartridge case. A tape drawing-out member (leader) 74 is provided on an end of the magnetic tape.

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Olsen does not explicitly state that the central portion of the tape drawing-out port is located at a position apart from the corner of said cartridge case by a distance equivalent to approximately one quarter of an edge length of the side of the cartridge. Olsen does not explicitly state that the tape is drawn out of the drawing-out port by the drawing-out member.

With regard to claim 13, it would have been obvious to one having ordinary skill in the art at the time the invention was made to locate the tape drawing-out port 56 at a position apart from the corner of said cartridge case so that its central portion is approximately one quarter of the edge length of the side of the cartridge from the corner since Olsen shows the port in that location and it would have been clear that locating the port at that location would have been fully capable of operating as desired.

With regard to claim 19, it would have been obvious to draw tape out of the drawing-out port 56 by the drawing-out member 74 as is well known for threading the tape through a utilization device.

Claims 8-10, 14, and 16-18 rejected under 35 U.S.C. 103(a) as being unpatentable over Martin as applied to claim 1 above, and further in view of Olsen.

Martin does not disclose a) a tape drawing-out port having a central portion spaced a distance equivalent to approximately one quarter of the edge length of a side of the cartridge from a corner, b) a tape drawing-out port located between a screw hole in a corner of the case for assembling the case and a position corresponding to a reference hole in a central portion of the case, c) a leader block that fits in the tape

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drawing-out port and forms part of the side wall of the cartridge when not in use, or d) separate upper and lower cases, or e) (in the Figs. 1-11 embodiment) a circular cutout in the upper case and stepped portion on the upper flange. Martin does not explicitly state that the tape is drawn out of the drawing-out port by the drawing-out member 238.

Martin teaches (see Fig. 15) providing a circular cutout in the upper case of a cassette cartridge for receiving a stepped portion of an upper flange. It would have been obvious to one having ordinary skill in the art to provide the cartridge of Martin with a circular cutout and stepped portion on the upper flange as taught by Martin to securely position and hold the reel against horizontal shifting in the cartridge.

Olsen teaches locating a tape drawing-out port 56 a) apart from a corner of a cartridge case with a central portion of the tape drawing-out port spaced a distance equivalent to approximately one quarter of the edge length of the side of the cartridge from the corner and b) between a hole for screw 34 in the corner of the case for assembling the case and a position corresponding to a reference hole 88 in a central portion of the case. Olsen teaches providing a tape cartridge with a leader block 74 that fits in the tape drawing-out port and forms part of the side wall of the cartridge when not in use (see Figs. 1 and 2) to securely retain the end of the tape. Olsen further teaches forming a tape cartridge from separate upper and lower cases 16, 18.

With regard to claims 8 and 9, assuming, arguendo, that the port 218 of Martin is not located at a position apart from a corner of the cartridge case, it would have been obvious to one having ordinary skill in the art at the time the invention was made to

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provide the drawing-out port 218 of Martin at such a location as taught by Olsen to allow for placement of screw holes or other attachment means.

With regard to claim 9, it would have been obvious to provide the cartridge of Martin with a reference hole in a central portion of the case such that the drawing-out port is located between the reference hole and the screw hole as taught by Olsen to securely retain the end of the tape.

With regard to claim 10, it would have been obvious to have located the tape draw-out port so that its central portion is approximately one quarter of the edge length of the side of the cartridge from the corner since Olsen shows the port in that location and it would have been clear that locating the port at that location would have made the cartridge been fully capable of operating as desired.

With regard to claim 14, it would have been obvious to provide Martin with a leader block that fits in the tape drawing-out port and forms part of the side wall of the cartridge when not in use as taught by Olsen to securely retain the end of the tape.

With regard to claim 16, it would have been obvious to form the case of Martin as separate upper and lower cases as taught by Olsen.

With regard to claim 17, it would have been obvious to provide the cartridge of Martin with a circular cutout in the upper case and stepped portion on the upper flange as taught by Martin to securely position and hold the reel against horizontal shifting in the cartridge. It would have been a matter of obvious engineering choice to make the upper flange smaller in diameter than inner diameter of cutout since the modified arrangement would clearly provide equivalent positioning and securing properties.

With regard to claim 18, it would have been obvious to provide Martin with a drawing-out member as taught by Olsen to draw tape out of the drawing-out port as is well known for threading the tape through a utilization device.

Response to Arguments

Applicant's arguments filed 2/28/03 have been fully considered but they are not persuasive.

Applicant argues that Martin does not disclose or suggest an upper case that has "a circular second opening having an inner diameter larger than the outer diameter of said lower flange but smaller than the outer diameter of the upper flange". However, it is respectfully pointed out that the opening defined by the upper edge of the upper portion of housing 206 is larger in diameter than lower flange 210 and smaller in diameter than the upper flange 208. Applicant further argues that Martin does not disclose or suggest a cartridge having a circular upper flange and an upper case. However, the housing 206 of Martin inherently has upper and lower cases integral with each other. The cartridge includes a reel having an upper flange 208.

Applicant argues that Martin does not disclose that the tape drawing-out port of 218 is spaced from the corner of the cartridge as recited in claims 8 and 11. Applicant compares the location of the drawing-out port 218 of Martin to that of the admitted prior art shown in Figure 7 of the application. The Examiner disagrees that the arrangement

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in Martin is analogous to the structure shown in prior art Figure 7. In Figure 7 of the application, the opening includes the corner. The location of drawing-out port 218 of Martin is more analogous to that of Figure 5 of the application in which the corner is left intact. The drawing-out port of Martin is, therefore, seen to be located apart from the corner. Assuming, arguendo, that the drawing-out port of Martin is located at the corner, it is seen to have been obvious from the teachings of Olsen to position it apart from a corner of the cartridge case. Applicant's arguments regarding claim 11 are moot in view of the new grounds of rejection based on Olsen, which shows a generally rectangular cartridge case.

Applicant's arguments regarding claims 10, 12, and 13, inasmuch as they apply to Hall, are moot in view of the new grounds of rejection. Olsen teaches a tape drawing-out port located approximately one quarter of the length of a cartridge side edge length from a corner of the cartridge case and teaches locating the drawing-out port between a screw hole and a reference hole.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Takeichi, et al is cited to further show a tape cartridge having a tape leader forming a portion of the cartridge side wall when not in use.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (703) 305-6498. The examiner can normally be reached on Monday - Thursday and every second Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (703) 308-2688. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.



SJH
May 4, 2003



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